

# Set system time automatically on Linux

## Introduction

It is possible to set and synchronize the time in Linux automatically through the systemd service. It's the successor of NTP daemon. In my network the mt-engine01.simmy.ch provides system time. Hence the device can change, I created an DNS alias ntp.simmy.ch. Using this alias allows changes of the time source without problems.

## Ubuntu 22.04 LTS

```
nano /etc/systemd/timesyncd.conf
```

This file is part of systemd.

#

# systemd is free software; you can redistribute it and/or modify it under the  
# terms of the GNU Lesser General Public License as published by the Free  
# Software Foundation; either version 2.1 of the License, or (at your option)  
# any later version.

#

# Entries in this file show the compile time defaults. Local configuration  
# should be created by either modifying this file, or by creating "drop-ins" in  
# the timesyncd.conf.d/ subdirectory. The latter is generally recommended.  
# Defaults can be restored by simply deleting this file and all drop-ins.

#

# See timesyncd.conf(5) for details.

[Time]

NTP=ntp.simmy.ch

FallbackNTP=0.pool.ntp.org, 1.pool.ntp.org, 2.pool.ntp.org

```
#RootDistanceMaxSec=5
#PollIntervalMinSec=32
#PollIntervalMaxSec=2048
```

```
systemctl restart systemd-timesyncd
```

# Debian

```
apt install systemd-timesyncd
nano /etc/systemd/timesyncd.conf
```

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# See timesyncd.conf(5) for details.

[Time]
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```
systemctl restart systemd-timesyncd
```

# Set the correct timezone

Figure out the timezone:

```
timedatectl list-timezones | grep Europe
```

Set the timezone

```
timedatectl set-timezone Europe/Zurich
```

## Useful commands / checks

```
root@iVentoy ~# timedatectl status
      Local time: Sat 2024-01-06 16:21:29 CET
      Universal time: Sat 2024-01-06 15:21:29 UTC
      RTC time: Sat 2024-01-06 15:21:29
      Time zone: Europe/Zurich (CET, +0100)
System clock synchronized: yes
      NTP service: active
      RTC in local TZ: no
root@iVentoy ~#
```

```
root@iVentoy ~# systemctl status systemd-timesyncd
* systemd-timesyncd.service - Network Time Synchronization
   Loaded: loaded (/lib/systemd/system/systemd-timesyncd.service; enabled; preset: enabled)
   Active: active (running) since Sat 2024-01-06 15:51:09 CET; 31min ago
     Docs: man:systemd-timesyncd.service(8)
  Main PID: 3022 (systemd-timesyn)
   Status: "Contacted time server 46.140.15.108:123 (0.debian.pool.ntp.org)."
```

Tasks: 2 (limit: 4650)

Memory: 1.3M

CPU: 39ms

CGroup: /system.slice/systemd-timesyncd.service

└─3022 /lib/systemd/systemd-timesyncd

Jan 06 15:51:09 iVentoy systemd[1]: Starting systemd-timesyncd.service - Network Time Synchronization...

Jan 06 15:51:09 iVentoy systemd[1]: Started systemd-timesyncd.service - Network Time Synchronization.

Jan 06 15:51:09 iVentoy systemd-timesyncd[3022]: Contacted time server 46.140.15.108:123  
(0.debian.pool.ntp.org).

Jan 06 15:51:09 iVentoy systemd-timesyncd[3022]: Initial clock synchronization to Sat 2024-01-06

14:51:09.538088 UTC.

root@iVentoy ~#

date

# Useful links

<https://www.digitalocean.com/community/tutorials/how-to-set-up-time-synchronization-on-debian-10>

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